

SAFphire Revisions

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SBL for Windows - Revisions

1.7.0

- SBL now waits 10ms. Between Ethernet Query messages. This speeds up downloads and communications other than annunciating.

1.6.9

- SBL now displays a prompt when replacing the current program on a rack with a program of a different name.
- when cutting or deleting a group that contained constants that were still referenced by labels, if "No" was selected when prompted to "Delete Anyway?" the constants disappeared from the screen until the next screen update (ie. scrolling). In the case of cutting the group, if the group was pasted back to the sheet SBL would crash.
- SBL now supports duplex printing.
- when adding a sheet that contains macros from another project to the current project the macro was not copied to the current project's directory.
- SBL would generate erroneous error messages for a macro that contained a label not attached to a connection.

1.6.8

- Sheet numbering is no longer maintained as part of the sheet's title block, it is now calculated when the title block is drawn. Sheets printed outside of a project will show "0 of 0".
- SBL would incorrectly update the path of one or more parameter files in a scope/recorder or annunciator window
- spelling of "windows" in status bar when cursor over the tile windows toolbar buttons
- Find Object would not find further occurrences of the search string after the most recently found object was deleted.
- multiple pages now printed as a single document
- unused labels inside a macro compile

1.6.7

- Compiler did not detect datatype mismatches between macro inputs and block inputs.
- Compiler would display multiple warnings for unreferenced or unconnected labels in macros.
- adding/removing a file other than a sheet to/from the project would cause a compile to be required.
- Scope windows lost their modified status after being modified automatically by SBL. SBL now displays a message informing the user that the paths of parameter files have been updated.
- Find & Rename did not rename macro inputs or outputs

1.6.6

- Compiler did not detect an external label connecting two sources together.
- When copying a group of objects if the user selected "Cancel" when prompted for a new name for one of the objects the group would be left permanently selected
- Macro inputs placed to the right or immediately below a nested macro were not processed properly by the compiler.
- Symbol table became corrupt after editing a local label of the same name as an external label on the same sheet.

1.6.5

- When using scope cursors the last value displayed remains in the status bar even if cursors are turned off
- When using scope cursors invalid values are displayed for boolean data channels
- Scope cursors were not hidden before updating the display in scope mode

- When adding a macro from a directory other than the current project's directory SBL would display a message indicating that the macro file already exists in the current project's directory and prompted to overwrite, even if the file did not previously exist.
- Chart recorder could cause GPF or extraneous error messages if a chart recorder window was restarted after previously failing to start due to no program being loaded on the node.

1.6.4

- When opening a large number of sheets SBL would run out of memory handles (a limited resource under Win95/98). SBL would then display a message indicating an error occurred while reading the file. This has been corrected so that SBL now reports the "Out of memory" error
- A bug introduced in version 1.6.2 caused sheets not to be renumbered correctly if the sheet was being moved up in the project list

1.6.3

- Chart recorder would hang if communication link failed
- Editing the chart recorder configuration of an existing recorder file and then saving the data to a new file would cause a GPF

1.6.2

- "View Tag Summary" menu command was only enabled for sheet or macro windows
- when creating new files, omitting the extension from would default to creating a new sheet
- when printing multiple page project lists, sheet numbering started at 1 for each page
- using "Save As" to copy a file to another drive did not copy the file
- changing the order of sheets in the project would sometimes cause a GPF
- commdemo could cause a GPF when downloading a block program or exiting SBL while a block program was executing

1.6.1

- title Block sheet numbers were not always updated properly after a sheet had been moved in the project window
- chart recorder would force trigger first time it was started
- compiler would cause GPF if symbol table was corrupted
- printing a file, other than a sheet or macro, using File | Print or the toolbar button, could cause a GPF
- added direct UDP packet addressing when annunciating to a single node, this permits single node annunciating across the Internet. Multinode annunciating uses broadcast UDP packets which can only be used on a LAN and will not travel across the Internet

1.6.0

- added sheet numbers in the project printout
- starting a chart recorder with parameters in the trigger expression that no longer existed would cause a GPF
- added error checking of trigger expression when starting chart recorder from toolbar button
- added a 100ms minimum to the total record time of chart recorder (Pre Trigger Time + Post Trigger Time)
- errors in the trigger expression are now highlighted in the recorder properties dialog box
- added a default delay for annunciating with the UDP module, the default is 5ms unless there is a "Delay=..." entry in the comm.ini file
- UDP module displayed "Serial Communication Module" as the title of some message boxes

1.5.9

- changed style of printing project files

1.5.8

- increased max node limit to 250
- fixed bug in compile and download prompts

- “Make” didn’t always compile properly after editing a macro

1.5.7

- title Block sheet numbers were not always updated properly after a sheet had been moved in the project window
- rename parameter file in scope files after a project copy that renamed the project
- window list in the “Window” menu was corrupted after a scope window was closed
- added force trigger to chart recorder, pressing “t” will cause the chart recorder to trigger

CA451 320 code (downloadable)

4.02

- Initial Release

CA418 / CA432 (OEM SAFphire) 320 code (downloadable)

3.37

- Fixed a bug that arose when entering -32768 into an absolute value block

3.36

- Reduced number of retries for CA417 in and out blocks
- Improved detection of too short scan times
- Finalized CA413 blocks]
- Fixed Delay block to trigger on first scan

3.35

- Added Ethernet IO Blocks
- Added preliminary CA413 blocks

3.34

- If SCAN TIME is 0, it is clamped to 16ms instead of 1 ms. This allows for switching sample times

3.33

- Replaced tachloss.asm with tachloss.c. Tachloss.c includes a bug fix. The bug occurred if you had a tach_fb signal of opposite polarity then the votage_fb but was not above the reversal setting. This did not trigger either tachloss or tach reversal.

3.32

- MBP READ and WRITE Blocks modified to not overload card and fix operation of CA410 and CA418 (along with CA410 pal change) (contains no SCANPORT blocks)

3.31

- started adding SCANPORT blocks for CA413, not released

3.30

- modified the posreg.c again. In version 3.29 the output was wrong if the feedback was not the same as spd ref. For example in version 3.28 if the feedback did not follow the ref as fast as expected the pos equation would adjust and make a faster decel time. The decel time was limited in 3.29 therefore you would end up with a big overshoot. In version 3.30 a change in max speed will be ramped as well as an instantaneous change in the sign of the error. But if the error is changed from a very high number to a very low number the speed ref may change instaneously

3.29

- again fixed posreg.c because if you lower the max speed on the fly there was no ramp. Also if you instantaneously went to a error that was low enough to limit the speed output you would also go to that new speed with out a ramp

3.28

- when sb1327 was compiled the new version of code composer links the object files in the order that the source code was added to the project. This seemed to cause address problems because in the past sblexec.obj was always linked first based on the command file. From now on when adding a new block or file to the project you have to remove and re-add saverest.asm, vectors.asm, and sblexec.c

3.27

- fixed the position reg block so that it will follow the accel and decel times when you instantaneously change the error from a negative to a positive value or vice a versa

Upgraded to Code Composer 3.04.

3.26

- added marker block, this block simulates a marker count based on a ppr and pulse count

3.25

- changed the background portion of the posreg block to calculate the decel pulses required more accurately. Changed the "gain 2 double" block to fix a roll over problem

3.24

- Reduced the retry time for the CA417 blocks

3.23

- fixed gain 2 double block to accept negative inputs with a fractional gain

3.22

- fixed fault relay bug for normal downloads.

3.21

- replaced saverest.asm function with new C50 version to handle floating point math (fixed problem with pos reg and sqrt)

3.20

- fixed bug with using multiple CA419 cards (added DDCS_BLOCKS array),

3.19

- added input and output blocks for the CA419 card. You must use sbl130.lib or oem130.lib

3.18

- added pos_reg block (need sbl129.lib)
- rewrote gain2 block
- modified sblexec.c for improved fault relay operation

3.17

- modified CA412 input block to properly read tach count

3.16

- modified CA407 input block to properly read tach count

3.15

- modified the ddc_in and ddc_out blocks to handle multiple nodes, and datasets using any number (needs at least 386 code version 1.34)

3.14

- modified upcount2 block to set outputs to 0 on reset input or power up in stead of just on a reset input

3.13

- the peak detect block was modified to come out of reset properly when the input value is changing.
- The tach_in block was modified to write the quad info to the card properly for channel 3.

3.12

- The saveparm block was modified to read the saved parms from the proper location on a ca418.

3.11

- The in417 block was modified so that it output a -1 for comms ok instead of a 1.
- The log_inv block was modified to output a 0 or a -1 instead of the compliment of the input.
- ethernet status block was added.

3.10

- the readreg and writereg blocks were modified
- commstat block was added

3.09

- modified lookup.c and lookp4.c to clamp the value entered to number of points

3.08

- fixed operation with CA407 out drive enable parameter OFF

3.07

- add code to clear localdata space to 0's on power up or download

3.03

- diameter calc fix

3.02

- Multiple Save Block Fixes

3.01

- Exe and scan time fixes, status word

CA451 386 code (downloadable)

1.00

- Initial Release

CA418 / CA432 (OEM SAFphire) 386 code (downloadable)

1.49

- Fixed small CA419 bug that was introduced in version 1.47 (/HOLDA)

1.48

- Improved DF1 Protocol

1.47

- Fixed Save Block (Corrupted in Ver 1.46)
- Cleaned up Interrupt Enables

1.46

- Added Preliminary Ethernet IO support

1.45

- Modified error handling of DDCS (OEM SAFphire only) to better handle back to back

1.44

- Made parameter Save a multiple step operation in order to not lock out ethernet communications
- Modified packet driver to work with 91C96 ethernet chips (disabled auto increment for read operations)

1.43

- Fixed receiving Ethernet Global Data greater than 64 words.

1.42

- fixed parameter save code

1.41

- fixed ethernet global data to accept nodes greater than 16.

1.40

- Added Modbus Slave Node configuration
- Moved Data Table to separate Flash Block to speed up parameter save and to not over write project.

1.39

- modified code to accept 320 fimware files greater than 64K

1.38

- Fixed no block prog loaded error message after a download is denied

1.37

- fixed an endless loop in start.c if there is a bad block program in an CA432 card

1.36

- fix tags for the hand terminal

1.35

- project upload and download added

1.34

- fixes multiple ddc's block problem

1.32

- fixed handling of invalid global data messages,
- added project download

1.31

- new ddc's code must use with sblcode 315 or higher

1.30

- updated packet driver for AUI operation

1.29

- re-enabled Watchdog, disabled DMA channels during watchdog reload.

1.27

- re-enabled interrupts in ISR
- added more time for the first program execution before reading DDCS info, disabled WATCHDOG.

1.26

- disabled serial port interrupt while doing getchars and char waiting fixed DF1 bugs

1.25

- replaced all DMA's with memcpy's,
- fix mbslave glitch using all 64 words, added latest packet driver,
- fixed received char counters for comm regs

1.22

- added mb slave read status cleaned up enable and disable calls

1.21

- rewrote got packet

1.20

- fixed save/upload, serial annun writes

1.19

- fixed announcing and global data at the same time

1.18

- fixed sercomms that used the wrong buffer pointer

1.17

- fixed save block and limited # of save parms to 60

1.16

- Changed DDCS ASIC wait stated from 7 to 1 except for a reset command
- added code for ethernet downloading

1.15

- ethernet global data, df1, modbus master, modbus slave
- removed TempData and calculated checksum for datatable out of flash

1.14

- add TempData to fix remote parameter save problem, changed flash wait states to 1 and DRAM wait states to 1

1.13

- added modbus code and only enabled DDCS if blocks are present

1.12

- added serial port diagnostics, fixed ISR handlers

1.11

- moved tables (data block etc) from data segment to pointers to 0x5000
- moved UpdateDDCS functions into Timer2 function to save time
- changed the TI320 function so that save register stuff and SendGlobalData would only be done on CA418's
- added a function SetupInterruptCtrl()
- decreased the DDCS time from 2msec to 1msec

1.10

- unused ISR's added and spurious interrupt detection

1.09

- less hold time (multiple DMA's) annunciate bug fix

1.08

- bug fix for downloading of larger data tables (reset DMA address)

1.07

- invalid block table bug fix

1.06

- df1 support and some ethernet added

1.05

- faster handterm fixed save blocks, accomodates CA418 and CA432

1.04

- new handterm, save blocks, comm ports ISR

1.03

- handterm fix for units of editable tags

<=1.02

- development versions

CA408-1 320 code (downloadable)

2.20

- fixed the peak detect block so both min and max are updated each scan

2.19

- put clamps on the number of points for the look up tables

2.18

- fix drive enable input of ca407out block

2.17

- add code to clear local data to 0's on power up

2.15

- fix running average block

2.14

- fix diam calc being improperly set to min

2.13

- fix round off error in calculating proper sample time

2.10

- fixed round off error in scaler block, and allowed ppr's above 6408

2.08

- fixed problem of ca408-1 not recovering from a power up properly

2.05

- increased clk2 to allow for faster encoders

CA408-1 8044 code (eprom)

2.08

- Xilinx change

2.07

- fixed inadvertant change to the baud rate

2.05

- Updated Xilinx file including writes to code and CLK2 for higher frequency tachs

2.04

- Initial working release of CA408-1 Code

CA408 320 code (eprom)

1.29

- The SAF-Link write block was changed from only updating the shared ram when data changed to updating it every sample time.

1.28

- The trajectory planner blocks were modified to allow operation at very low scan times.

1.27

- The SAF-Link read block was modified

1.26

- Added CA416-2 INPUT block was added requires SBL115

1.25

- The SPEEDLOOP1 and SPEEDLOOP2 blocks were fixed for long term operation

1.23

- changes the marker output of the CA412 block from a ON = 1 to a ON = -1. .

1.22

- This change fixes the diameter calculator

1.21

- Added SAFlink READ, SAFLink WRITE, FILTER, UPCOUNTER2, LENGTH COUNTER2 blocks

1.18

- Addition of save Block, Addition of CA403 auto calibrate software pots for SAFphito,
- Changed interrupt frequency of ModBus Plus interrupts
- Changed the frequency of diameter calculator block

1.16

- add CA412 blocks

1.15

- modified CA410 blocks
- added "ONSHOT2". The range of the new oneshot block is 1msec to 32.767 sec..

1.14

- fixes the ilimit output of the speed loop blocks
- adds an 16 channel analog latch.

1.13

- fixes the running average block and its possible corruption of other blocks.
- new and improved TRAJECTORY_PLANNER BLOCK

CA408 8044 code (eprom)

1.13

- fixed upload requiring multiple messages

1.12

- added save block

1.11

- beta release - dcxmain synchronized service loop error fixed

1.10

- beta release - annunciator version

1.09

- alpha, more fixes with info_ptr

1.08

- alpha, with minor bug fixes

1.07

- beta, annunciator only - t/t removed

1.06

- beta0, annun + trace/trigger version

1.05

- beta, annunciator version.

1.04

- pre annun